PART I - ADMINISTRATIVE

Section 1. General administrative information

Title of project

Protect And Restore The Squaw To Papoose Creeks Watersheds

BPA project number: 9607709

Contract renewal date (mm/yyyy): 3/2000 Multiple actions?

Business name of agency, institution or organization requesting funding

Nez Perce Tribal Fisheries/Watershed Program

Business acronym (if appropriate) NPT

Proposal contact person or principal investigator:

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NPPC Program Measure Number(s) which this project addresses

Section 7.1 - Ensuring Biodiversity;

Section 7.6 - Habitat Goals, Policies, and Objectives;

Section 7.7 - Cooperative Habitat Protection and Improvement with Private Landowners;

Section 7.8 - Implement State, Federal, and Tribal Habitat Improvements.

FWS/NMFS Biological Opinion Number(s) which this project addresses

Land and Resource Management Plans for National Forests Bureau of Land Management Resource Areas in the Upper Columbia Basins and Snake River Basin Evolutionarily Significant Units, 1998.

Other planning document references

BPA. 1997. Watershed Management Program: Final Environmental Impact Statement.

Connor, A.H., and C. Bradbury. 1998. The 1997 Watershed Improvement Needs Inventory and Road Obliteration Survey of Squaw and Papoose Creek and the Cedars Areas. Clearwater National Forest (CNF). Orofino, ID.

CNF and Nez Perce Tribe (NPT). 1997. Challenge Cost-Share Agreement between the CNF and the NPT. Lapwai, ID.

Columbia Basin Fish and Wildlife Authority. 1997. Integrated Watershed Projects: The Process and Criteria for Selecting Watershed Projects for the Columbia Basin Fish and Wildlife Program.

NPPC. 1994. Columbia River Basin Fish and Wildlife Program. Portland, OR.

CRITFC. 1995. WY-KAN-USH-MI WA-KISH-WIT, Spirit of the Salmon. Vol. I and II. Portland, OR.

CNF, NPT. 1998. A Watershed Analysis for the area from Squaw to Papoose Creeks. Powell, ID.

NPT and Idaho Dept. of Fish and Game. 1990. Clearwater River Subbasin Salmon and Steelhead Production.

Short description

Protecting and restoring the Squaw to Papoose Creek Watersheds is the overall goal of this project. We will achieve this working within an overall watershed approach, based on a completed watershed analysis.

Target species

Spring Chinook Salmon, Steelhead, Bull Trout, and Westslope Cutthroat Trout.

Section 2. Sorting and evaluation

Subbasin

Clearwater Sub-basin

Evaluation Process Sort

CBFWA caucus Special evaluation process		ISRP project type
	If your project fits either of	
Mark one or more	these processes, mark one	
caucus	or both	Mark one or more categories
	Multi-year (milestone-	☐ Watershed councils/model
fish	based evaluation)	watersheds
Resident fish		☐ Information dissemination
Wildlife	evaluation	Operation & maintenance

☐ New construction
Research & monitoring
☐ Implementation & management
☐ Wildlife habitat acquisitions

Section 3. Relationships to other Bonneville projects

Umbrella / sub-proposal relationships. List umbrella project first.

Project #	Project title/description

Other dependent or critically-related projects

Project #	Project title/description	Nature of relationship
9608600	Idaho Soil Conservation Commission The Focus Program is co-coordinate	
	Focus Watershed Program	between the NPT and the State of
		Idaho.
970600	Nez Perce Tribal Focus Watershed	The Focus Program is co-coordinated
	Program	between the NPT and the State of
		Idaho.
9809802	Salmon Supplementation in Idaho	Protect and restore watersheds for
	Rivers	anadromous and resident fish habitat.
9607707	Focus Watershed Coordinator	was in umbrella table
9901700	Protecting and Restoring Lapwai	was in umbrella table
	Creek Watershed	
9607708	Protecting and Restoring Lolo Creek	was in umbrella table
	Watershed	
9901600	Rehabilitation of Big Canyon Creek	was in umbrella table
9607711	Restoring McComas Meadows -	was in umbrella table
	Meadow Creek	
	Lostine River Rehabilitation	was in umbrella table
20087	Protection of Mill Creek	was in umbrella table
20086	Rehabilitation of Newsome Creek	was in umbrella table

Section 4. Objectives, tasks and schedules

Past accomplishments

Year	Accomplishment	Met biological objectives?
1996	Stabilized 3 landslides.	N/A
1996	Unplugged 5 culverts.	N/A
1996	Placed large woody debris in-stream.	N/A
1996	Re-vegetated 1 mile of stream banks.	N/A

1997	Obliterated 9 miles of system/non-system	N/A
	roads.	
1998	Obliterated 12 miles of system/non-	N/A
	system roads.	

Objectives and tasks

Obj		Task	
1,2,3	Objective	a,b,c	Task
1	Alleviate sediment input and	a	Consult, update, and finalize the
	potential from road sources.		Cost-Share Agreement between the
			Nez Perce Tribe (NPT) and the
			Clearwater National Forest (CNF)
			on watershed restoration.
		b	Consult with the CNF on identifying
			40 miles of roads for survey
			inventory and 20 miles of road to be
			obliterated.
		С	Perform all pre-work needs, training,
			and logistics internally and with the
			CNF.
		d	Consult with the CNF on any
			necessary environmental analysis -
			Categorical Exclusion.
		e	Survey 40 miles of roads.
		f	Obliterate 20 miles of roads and
			provide erosion control on any
			disturbed areas.
2	Perform monitoring and	a	Re-visit previous years work to
	evaluation (M&E) of road		evaluate and improve road
	obliteration techniques and		obliteration techniques.
	proceedures.	1	
		b	Consult with the CNF on techniques
	Develop a manife i		and proceedures M&E program.
3	Develop a monitoring and	a	Gather watershed and stream survey
	evaluation program of road		information.
	obliteration overall success.	b	Davalan a program on hanafita of
		D	Develop a program on benefits of road obliteration on the affected
			watersheds over time.
4	Transfer of project information to	0	Perform quarterly reports on project
4	all obligatory agencies and	a	progress as they become due.
	an oungaiory agencies and		progress as mey become due.

	interested organizations or parties.		
		b	Complete final end of the year report
			of project.
		c	Perform necessary presentations to
			the public and project peers.

Objective schedules and costs

Obj#	Start date mm/yyyy	End date mm/yyyy	Measureable biological objective(s)	Milestone	FY2000 Cost %
1	1/2000	8/2000	N/A	X	85.34%
2	5/2000	8/2000	N/A	X	5.83%
3	7/2000	11/2000	N/A	X	5.87%
4	3/2000	12/2000	N/A	N/A	2.96%
				Total	100.00%

Schedule constraints

Existing schedules for the 2000 budget year may change due to weather conditions. All on-the-ground projects occur in mountainous areas at elevations up to 5000 feet above sea level, where unpredictable weather patterns may occur.

Completion date

Based on a completed watershed analysis, watershed work is estimated to be done by the year 2003 with M&E to continue beyond. The Cost-Share Agreement for watershed restoration between the NPT and the CNF is designed to be extended for the next 5 years.

Section 5. Budget

FY99 project budget (BPA obligated): \$241,693

FY2000 budget by line item

		% of	
Item	Note	total	FY2000
Personnel		%27	96,328
Fringe benefits		%4	14,776
Supplies, materials, non-		%1	2,860
expendable property			
Operations & maintenance		%0	
Capital acquisitions or		%0	
improvements (e.g. land,			
buildings, major equip.)			
NEPA costs		%0	

Construction-related		%0	
support			
PIT tags	# of tags:	%0	
Travel		%6	22,380
Indirect costs		%10	35443
Subcontractor		%46	163,200
Other	Vehicle Costs	%5	18,620
	\$353,607		

Cost sharing

Organization	Item or service provided	% total project cost (incl. BPA)	Amount (\$)
Clearwater National	Planning, road idenification,	%46	300,000
Forest	technical support, onsite		
	contract administration,		
	obliteration of additional		
	miles of roads, continuation		
	of flood damage restoration.		
		%0	
		%0	
		%0	
Total project cost (including BPA portion)			\$653,607

Outyear costs

	FY2001	FY02	FY03	FY04
Total budget	\$399,698	\$439,668	\$483,634	\$65,805

Section 6. References

Watershed?	Reference
	Clearwater BioStudies, Inc. 1996. Repeat surveys of selected reaches of
	streams in the Lochsa River drainage (Draft), Idaho. Powell and Lochsa
	Ranger Districts, Summer 1996. Contract No. 52-0276-5-18, prepared for
	USDA Forest Service, CNF. Orofino, ID
	Clearwater BioStudies, Inc. 1994d. Habitat conditions and salmonid
	abundance in Papoose Creek, Powell Ranger District, Summer 1993.
	Contract report no. 53-0276-3-15, prepared for USDA Forest Service,
	Clearwater National Forest. Orofino, ID.
\boxtimes	CNF, NPT (Clearwater National Forest, Nez Perce Tribe). 1998. A
	Watershed Analysis for the Area from Squaw to Papoose Creeks. Lochsa
	Ranger District, Powell Unit.
	Connor, A.H., and C. Bradbury. 1998. The 1997 Watershed Improvement

Needs Inventory and Road Obliteration Survey of Squaw and Papoose Creeks
and the Cedars Area. Clearwater National Forest. Orofino, ID.
CRITFC (Columbia River Inter-Tribal Fish Commission). 1995. WY-KAN-
USH-MI-WA-KISH-WIT, Spirit of the Salmon, The Columbia River
Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm
Springs, and Yakama Tribes. Volume I. Portland, OR.
McClelland, et al. 1997. Assessment of the 1995 & 1996 Floods and
Landslides on the Clearwater National Forest. Part 1: Landslide Assessment.
Northern Region United States Forest Service. Missoula, MT.
Nez Perce Treaty of 1855 with the United States Federal Government.
NPPC (Northwest Power Planning Council). 1994. Columbia River Basin
Fish and Wildlife Program.
Pipp, et al. 1997. Watershed Response to an Extreme Precipitation and High
Streamflow Event in Managed Basins (Draft). Powell Ranger District of the
Clearwater National Forest, Powell, ID.
USDA (United States Department of Agriculture). 1997. National Indian
Forest Resource Management Act, Public Law 101-630.

PART II - NARRATIVE

Section 7. Abstract

Protecting and restoring the Squaw to Papoose Creeks watersheds, to assist in increasing anadromous fish populations, is the overall goal of this project. This project works toward achieving the goals and objectives of the Columbia River Basin Fish and Wildlife Program and the Spirit of the Salmon Anadromous Fish Restoration Plan of the Tribes. This project proposal works toward this by working within an overall watershed approach, based on a completed watershed assessment Alleviating sediment input and potential from road sources has been determined a high priority by the watershed assessment. We will address this by surveying and obliterating roads that are presently or show potential for adding sediment into streams and tributaries important to anadromous fish. A road survey will be comleted using the Watershed Improvement Needs (WIN) inventory, such that the survey information needed for road obliteration is gathered along with other watershed problems. Road obliteration practices vary depending on stability, and generally entails removing culverts and restoring natural drainage patterns, reshaping unstable fill and cut banks to their natural slopes, and performing erosion control on all disturbed surfaces. Monitoring and evaluation (M&E) will be done on two aspects of road obliteration. The first will M&E procedures and techniques, in order to improve future obliteration practices. The second will M&E how road obliteration has improved overall watershed and ecosystem health over time. Lastly, project progress and information will be made available to obligatory and interested organizations and parties through quarterly reports, end of the year reports, and presentations. The expected outcome of our work will decrease mass failure and surface erosion potential from road related sources. This reduction in sediment will allow these watersheds and their streams and tributaries to heal with time to their proper functioning condition, increase

available fish spawning and rearing habitat, assist in enlarging their populations, and protect Nez Perce Tribal resources and cultural values.

Section 8. Project description

a. Technical and/or scientific background

The Squaw to Papoose Creeks watersheds are located within the 1855 treaty territory of the Nez Perce Tribe in the Clearwater National Forest. The analysis area provides habitat for serveral highly valued salmonid species, including chinook salmon, steelhead, bull trout, and westslope cutthroat trout. Within the analysis area, both anadromous and resident fish habitat were negatively affected by past land management practices, including road building, logging, and stream cleanout (CNF, NPT, 1998).

The Squaw to Papoose Creek Watersheds are extremely important to the Nez Perce Tribe for their fisheries, cultural, and traditional values. The main goals of this project are (1) to protect and restore the watersheds from Squaw to Papoose Creeks, so they can return to their proper functioning condition, producing a healthy environment for fish, and (2) protect Nez Perce Tribal resources and cultural values. This will be accomplished using and overall watershed approach, based on a completed watershed assessment.

Most forest roads in the Squaw to Papoose Creek Watersheds were built for timber harvest, in the 1950-70's. Past timber harvest equipment had extremely limited reaches, and for this reason, a great number of roads were constructed. A great portion of these roads were thought to be stable from the amount of vegetation growth and abandoned. The flood events of 1995 and 1996 proved that many of these roads are not stable. Landslides originating on closed or abandoned roads have been identified as a major cause of sediment delivery to streams (McClelland et. Al., 1997).

During late November to early December 1995, the Squaw to Papoose Creek Watersheds were hit hard by flood events, receiving 314% of the average precipitation for the area. A field survey, during the summer of 1996, identified and quantified 41 mass failures in the Squaw Creek Watershed with 51% being road related. In the Papoose Creek Watershed, 76 landslides were recorded with 74% of these being road related (Pipp, et al., 1997). Massive amounts of soil, rock, and woody debris entered into streams as a result of these landslides. This bedload and sediment deposition has increased cobble embeddeness and negatively impacted spawning and rearing habitat for salmon, steelhead, bull trout, and cutthroat trout (CRITFC, 1995). For example, monitoring results showed that in five stream reaches in the mainstem Squaw Creek, cobble embeddeness conditions ranged from 19.2 to 42.6% prior to the flooding and ranged from 34.9 to 46.0% after the landslides (Clearwater Biostudies, Inc, 1994; 1996). The instability of the steams, as a result of the high sediment and bedloads, has also limited any in-stream habitat projects and work.

Putting fish back into river and stream systems alone is not enough to restore their populations, they need a healthy system to return, spawn, and rear in. Our proposal

objectives will mitigate (in place, in kind) the problems stated above by decreasing sediment into rivers and streams, which will allow the stream environment to heal and return to their original capacity for spawning and rearing habitat. The goals and objectives of our project proposal strives towards meeting all of the goals and objectives found in the Wy-Kan-Ush-Mi Wa-Kish-Wit (CRITFC, 1995), as stated below:

ANADROMOUS FISH RESTORATION PLAN OF THE TRIBES GOALS

- Restore anadromous fishes to the rivers and streams that support the historical culture and economic practices of the tribes.
- Emphasize strategies that rely on natural production and healthy river systems to achieve this goal.
- Protect tribal sovereignty and treaty rights.
- Reclaim the anadromous fish resources and the environment on which it depends for future generations.

ANADROMOUS FISH RESTORATION PLAN OF THE TRIBES OBJECTIVES

- Within 7 years, halt the declining trends in salmon, sturgeon, and lamprey populations originating upstream of Bonneville Dam.
- Within 25 years, increase the total adult salmon returns of stocking originating above Bonneville Dam to 4 million annually and in a manner that sustains natural production to support tribal commercial as well as ceremonial and subsistence harvests.
- Within 25 years, increase sturgeon and lamprey populations to naturally sustainable levels that also support tribal harvest abundance in perpetuity.

The project proposal also protects the goal of tribal sovereignty and treaty rights. In the Treaty of 1855, the Nez Perce Tribe ceded much of their aboriginal territory to the United States in exchange for a reservation that was to serve as a permanent homeland. In that treaty, the Nez Perce Tribe reserved certain rights including, "the exclusive right of taking fish in all the streams running through or bordering said reservations is further secured to said Indians (Nez Perce Treaty, 1855)." According to this, the federal government's has a trust agreement to protect all tribal resources. The proposal will work toward protecting our resources, therefore fulfilling the government's responsibilities. The project will also allow the tribe to manage our own tribal resources, which will in turn protect our sovereignty and treaty rights. This is called for in the *National Indian Forest Resource Management Act (PL 101-630)*, which provides for the management of forested tribal trust lands (USDA, 1997).

The Nez Perce Tribal Fisheries/Watershed Program along with the Earth Conservation Corps, (Nez Perce Salmon Corps.), completed several projects in 1996. These projects included, stabilizing 3 landslides, unplugging 5 culverts, placing large woody debris instream, and re-vegetating 1 mile of stream bank within the Squaw to Papoose Creeks watersheds. In the 1997 season, the Nez Perce Tribal Fisheries/Watershed Program, in conjunction with the Clearwater National Forest and Earth Conservation Corps, (Nez

Perce Salmon Corps.), obliterated a total of 9.0 miles of system/non-system roads within Squaw and Papoose Creek watersheds. In the 1998 season, Emmit E. Taylor Jr. (Civil EIT), road obliteration inspector, and a three member erosion control crew of the Nez Perce Tribal Fisheries/Watershed Program obliterated 12 miles of road. It is planned in the 1999 season (pending BPA approval) to continue with 24 miles of road to be obliterated. Mr. Taylor will continue as the inspector and the crew will continue with the erosion control. Ira Jones (Nez Perce Tribal Fisheries/Watershed Program Manager) has facilitated all activities with the Clearwater National Forest, including the Challenge Cost-Share Agreement, in 1997 and 1998, and will continue in 1999 and beyond.

b. Rationale and significance to Regional Programs

The project will work towards 7.6 Habitat Objective of the *NPPC Fish and Wildlife Program* to limit the percent of fine sediment in salmon and steelhead redds to no more than 20 percent and limit cobble embeddedness (CE) to less than 30 percent or documented historic condition (NPPC, 1994). Landslides, as a result of the 1995 and 1996 floods, have delivered massive amounts of sediment into streams and tributaries of the Squaw to Papoose Creeks. In the Squaw Creek Watershed, mean CE increased from 31% to 41% and in the Papoose Creek Watershed, mean CE shifted from 27% to 41% (CNF, 1997). As a result of this increased sedimentation and cobble embeddedness (CE), spawning habitat has decreased. With the amount of system and non-system roads remaining within the watersheds, along with surface erosion from these roads, the potential for further mass sedimentation is great. Our project proposal will directly aide in decreasing CE with in these two streams by removing roads that are adding sediment into streams and tributaries or have a high mass failure potential.

Protecting and restoring the Squaw and Papoose Creek Watershed is called for in the objectives and goals of the *Spirit of the Salmon Anadromous Fish Restoration Plan of the Nez Perce, Umatilla, Warm Spring, and Yakama Tribes (Volume II)* as stated above in Section 7, Part (a) of this proposal. This plan specifically recommends actions for the Clearwater River System including: (1) Logging, road building and the loss of the riparian vegetation has created high cobble embeddeness. To eliminate or reverse this problem, those practices should be stopped or severely restricted until the streams can recover; and (2) Sedimentation due to logging is occurring throughout the watershed. In addition, mining and road building also continue to create sedimentation problems. The watershed must be left to recover by eliminating or severely restricting these practices. This project proposal directly addresses this plan by eliminating system/non-system roads that are presently or have the potential of adding sediment into Squaw to Papoose streams and tributaries.

In the fall of 1998, A Watershed Analysis for the Area from Squaw to Papoose Creeks was completed by the Clearwater National Forest in partnership with the Nez Perce Tribe. In this analysis, road obliteration is a high priority due to the past, present, and future potential of sedimentation into streams by road-related causes. During the 1995-1996 flood events, mass failures and surface erosion from road sources deposited thousands of cubic yards of material into the Squaw to Papoose Creeks, most of which is

still in the systems (CNF, NPT, 1998). To date, sedimentation has impacted these important anadromous fish streams negatively. The old jammer roads in these watersheds are the trigger that can potentially deliver thousands of additional yards of coarse and fine sediments to aquatic habitat in the analysis area. Of all surveyed roads in the drainages, there is a potential of approximately 75,000 cubic yards of road fill that could fail (Connor and Bradbury, 1998). This project proposal will work toward decreasing the risk of large amounts of sediment entering these streams, which will in turn improve anadromous fish habitat.

The *Idaho Salmon Supplementation Studies*, Project Number #8909802, is a project that is funded by BPA and has direct ties to the Squaw to Papoose Creeks watersheds. In 1998, this project was awarded \$233,000 and \$339,334 in 1999 by BPA. Squaw and Papoose Creeks have been apart of this project plan since 1991, when it began, and is projected to year 2007 and possibly 2015. The *Idaho Salmon Supplementation Studies* is a cooperative research project of the Idaho Fish and Game, the NPT, Shoshone-Bannock Tribes, and the U.S. Fish and Wildlife Service to test supplementation on an experimental basis. In order for this project to be successful, habitat conditions for fish need to be as beneficial as possible. Both Squaw and Papoose Creeks were severely impacted by the amount of sedimentation by mass failures that resulted from roads during the floods of 1995 and 1996. Sedimentation is presently occurring and the potential from further mass failure by roads is great. Restoration work proposed by this project targets alleviating the potential for further habitat degradation in these supplementation streams by preventing road-derived damage.

A *Challenge Cost-Share Agreement* has been developed between the *Nez Perce Tribe* (*NPT*) and the *Clearwater National Forest* (*CNF*). This agreement discusses the relationship between the two governments with regard to watershed work, planning, and management within the Squaw to Papoose Creeks watersheds, as well as the entire CNF. Thi